## **CLAIMS**

5

25

- 1. Use of Ginkgo complexed with a phospholipid containing from 10 to 50% of phosphatidylserine for the manufacture of a medicament or a dietary supplement for the enhancement of cognitive function and mental fatigue and/or for the treatment and prevention of a disease related with the reduction of cognitive function and mental fatigue.
  - 2. Use according to claim 1 wherein the phospholipid contains from 20 to 40% of phosphatidylserine.
- 10 3. Use according to claims 1-2 wherein the phospholipid contains 20% of phospatidylserine.
  - 4. Use according to claims 1-3, wherein the *Ginkgo* is derived from the plant *Ginkgo biloba*, extracts thereof and/or one or more principal active substances thereof.
- 15 5. Use according to claim 4, wherein one of the principal active substances is bilobalide.
  - 6. Use according to claim 4, characterized in that the *Ginkgo* extract is used containing at least about 20% ginkgo flavone glycosides and about 2 to about 10% terpene lactones.
- 7. Use according to any one of claims 1 to 6, wherein the ratio between Ginkgo and the phosphatidylserine used to prepare the complex is about 0.3:1.5.
  - 8. Use according to any one of the preceding claims 1 to 7, wherein the Ginkgo complexed with a phospholipid is lipophilic in character and is soluble in nonpolar and aprotic solvents, in which the individual components of the complex are insoluble.
  - 9. Use according to any one of the preceding claims 1 to 8, wherein the Ginkgo complexed with a phospholipid containing from 10 to 50% of

5

10

20

25

phosphatidylserine is obtainable by a process comprising the steps of

- (a) by reacting an extract of *Ginkgo* with phospholipid containing from 10 to 50% of phosphatidylserine in a suitable solvents selected from the group consisting of hot cyclic ether, optionally halogenated aromatic hydrocarbons, methanol-methylene chloride mixture or aliphatic esters at elevated temperatures, preferably from 30 to 100°C, and
- (b) evaporation of the solvent, and
- (c) drying the soft residue obtained from step (b) at temperature ranging from 30 to 50°C for 24 to 48 hours.
- 10. Use according to any one of the preceding claims 1 to 9, wherein the medicament or dietary supplement is administered in the form of tablets, granules, powders, capsules, syrups, solutions, suspensions, dragees, gels, injections or drops.
- 15 11. Use according to any one of claims 1 to 10, wherein the medicament or dietary supplement is formulated for oral administration.
  - 12. Use according to any one of the preceding claims 1 to 11, wherein the *Ginkgo* phosphatidylserine complex contained in the medicament or dietary supplement is to be administered in an amount of about 20 to about 240 mg per day, particularly about 60 to about 120 mg per day.
  - 13. Use according to any one of the preceding claims 1 to 12, wherein the medicament or dietary supplement additionally contains a pharmaceutically acceptable amount of at least one additive selected from the group comprising minerals, vitamins, sweeteners, flavors, pharmaceutically acceptable carriers, auxiliary and binder agents, excipients and mixtures thereof.
  - 14. Use according to claim 13, wherein the additive is selected from vitamins, minerals and mixtures thereof, particularly selected from calcium, fluorine, phosphorus, copper, potassium, manganese, magnesium selenium,

5

20

zinc and iron, vitamin A, vitamins B1, B2 and B12, vitamin C, vitamin D2, nicotinamide, calcium pantotenate, rutoside and vitamin E.

- 15. Use according to any one of the preceding claims 1 to 14, wherein the speed of memory and memory quality is enhanced by counteracting cognitive fatigue in normal, healthy persons or by preventing deterioration of the speed of memory in people with decreased cognitive functions.
- 16. Use according to any one of the preceding claims 1 to 14, wherein the disease is Dementia.
- 17. Use according to claim any one of the preceding claims 1 to 14 wherein the disease is Alzheimer's Disease.
  - 18. Use according to any one of the preceding claims 16 or 17 in combination with a pharmaceutical compound used for the treatment and prevention of the disease to be treated related with the reduction of cognitive function and mental fatigue.
- 15 19. Use according to claim 18, wherein the pharmaceutical compound is selected from the group consisting of acetylcholinesterase inhibitors and complexed grape seed extracts.
  - 20. A pharmaceutical or dietary composition comprising *Ginkgo* complexed with a phospholipid containing from 10 to 50% of phosphatidylserine and at least one vitamin and a pharmaceutically or dietarily acceptable carrier.
  - 21. A complex of an extract of Ginkgo with a phosphatidylserine of formula

wherein

R and R<sup>1</sup> each independently represent an acyl moiety selected from the fatty acids consisting of palmitic acid, oleic acid, linoleic acid, stearic acid, and

R<sup>2</sup> represents the residue of serine.

22. A complex according to claim 21, which comprises from 15 to 25% of saturated fatty acids, from 5 to 15% of mono-unsaturated fatty acids and from 60 to 80% of polyunsaturated fatty acids, based on the total acids.